



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Fisher, Wayne E.

Assignee: Peregrine Bridge Transfer Corporation

Title: Facilitating Maintenance Of Indexes During A Reorganization Of Data
In A Database

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COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO NON-FINAL OFFICE ACTION DATED 10/27/03

I. INTRODUCTORY COMMENTS

Dear Sir:

This paper is responsive to the Office Action dated October 27, 2003, having a shortened statutory period expiring on January 27, 2004, extended to March 27, 2004 by the petition and fee filed concurrently herewith. Further examination and reconsideration are respectfully requested in view of the remarks set forth below.

In addition, Applicant notes that his Second Information Disclosure Statement is being filed concurrently with this Response.

Amendments begin on page 2 of this paper; Remarks begin on page 4 of this paper; and the Conclusion begins on page 7 of this paper.

II. AMENDMENTS

CROSS REFERENCE TO RELATED APPLICATIONS

A¹
The present application is related to the following applications filed on the same date herewith, all of which are assigned to same assignee as the present invention, and all of which are hereby incorporated by reference and made a part hereof as if fully set forth herein: U.S. Patent Application Serial No. _____, 10/037,933, Space Management Of An IMS Database; U.S. Patent Application Serial No. _____, 10/036,069, ~~Facilitating Maintenance Of Indexes During A Reorganization Of Data In A Database~~ Splitting Prefix And Data Components Of Each Segment In A Database; U.S. Patent Serial No. _____, 10/036,786, Employing A Unit Of Work Methodology To Facilitate Reorganization And User Controlled Placement Of Data In Databases; and U.S. Patent Application Serial No. _____, 10/036,815, Ensuring That A Database And Its Description Are Synchronized.

ABSTRACT OF THE DISCLOSURE

A²
An index can be maintained during a reorganization of data in a database by retaining each root segment, or the prefix component of each root segment, in its storage location during the reorganization. Correction of an index after a reorganization of data in a database can be facilitated by assigning a unique token to each target segment, or the prefix component of each target segment, and each corresponding index entry having an address to a target segment, prior to a reorganization of data. The unique token for a given target segment, or the prefix component for a given target segment, and the unique token for a corresponding index entry are the same. After a reorganization of data in the database, the unique token of a first index entry is read. Then, the unique token of each target segment, or the prefix component of each target segment, is read until a match is found. ~~between the unique token of a matching target segment, or the prefix component of a matching target segment, and the unique token of the first index entry. After a match is found, the address of the first index entry is replaced with the address of the matching target segment, or prefix component of the~~

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A matching target segment. If the first index entry is associated with a particular database record, the search for a token which matches the first index entry's token can be focused on the segments for that database record. All the segments for a record can be stored within a single block of storage locations. Before the address of an index entry is corrected, it can be determined if the address is valid. The address of the index entry will then be corrected only if it is determined to be invalid.